

EXHIBIT D

In the Matter Of:

MAAS v

BP EXPLORATION & PRODUCTION

CHARLES WRAY, M.D.

July 23, 2021



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<p>1 UNITED STATES DISTRICT COURT FOR</p> <p>2 THE MIDDLE DISTRICT OF TENNESSEE</p> <p>3 NORTHEASTERN DIVISION</p> <p>4 JOHN SCOTT MAAS, PLAINTIFF</p> <p>5 vs.</p> <p>6 CAUSE NO.:</p> <p>7 BP EXPLORATION & PRODUCTION 2:20-cv-00051</p> <p>8 INC. & BP AMERICA PRODUCTION</p> <p>9 CO., DEFENDANTS</p> <p>10</p> <p>11 Videotaped Deposition of:</p> <p>12 CHARLES WRAY, M.D.</p> <p>13</p> <p>14 Taken on behalf of the Defendants</p> <p>15</p> <p>16 July 23, 2021</p> <p>17 -----</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p>1 I N D E X</p> <p>2 Questions by Mr. Jarvis 7</p> <p>3 Questions by Mr. Burger 45</p> <p>4</p> <p>5</p> <p>6 E X H I B I T S</p> <p>7 Exhibit 1 Plaintiff's Rule 26 Expert Disclosure 11</p> <p>8 of Charles J. Wray, M.D. 13</p> <p>9 Exhibit 2 Draft from Dr. Antony (Late Filed)</p> <p>10 Exhibit 3 Respiratory, Dermal, and Eye Irritation 22</p> <p>11 Symptoms Associated with Corexit</p> <p>12 Following the Deepwater Horizon Oil</p> <p>13 Spill: Findings From the Gulf Study</p> <p>14</p> <p>15 Exhibit 4 The Impact of the Deepwater Horizon Oil 24</p> <p>16 Spill Upon Lung Health</p> <p>17 Exhibit 5 The Development of Long-Term Adverse 25</p> <p>18 Health Effects in Oil Spill Cleanup</p> <p>19 Workers of the Deepwater Horizon</p> <p>20 Offshore Drilling Rig Disaster</p> <p>21</p> <p>22 Exhibit 6 Comparative Toxicity of Two Oil 25</p> <p>23 Dispersants, Super Dispersant-25</p> <p>24 And Corexit 9527, to a Range of</p> <p>25 Coastal Species</p> <p>26 Exhibit 7 Evaluation of Pulmonary and Systemic 25</p> <p>27 Toxicity of Oil Dispersant, Corexit</p> <p>28 EC9500A, Following Acute Repeated</p> <p>29 Inhalation Exposure</p> <p>30</p> <p>31 Exhibit 8 The Impact of Oil Spill to Lung Health. 26</p> <p>32 Insights From an RNA-Sequence Study of</p> <p>33 Human Airway Epithelial Cells</p> <p>34</p> <p>35 Exhibit 9 Oil Dispersants Used in Gulf Oil 26</p> <p>36 Spill Causes Lung and Gill Injuries to</p> <p>37 Humans and Aquatic Animals. Also</p> <p>38 Identifies Protective Enzyme</p> <p>39</p> <p>40</p> <p>41</p> <p>42</p> <p>43</p> <p>44</p> <p>45</p>
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<p>1 APPEARANCES:</p> <p>2 For the Plaintiff: WILLIAM KENNERLY BURGER, ESQ.</p> <p>3 Burger, Scott, & McFarlin</p> <p>4 12 North Public Square</p> <p>5 Murfreesboro, Tennessee 37130</p> <p>6 (615) 893-8933</p> <p>7 Kenburger@comcast.net</p> <p>8</p> <p>9 For the Defendants: HOWARD E. JARVIS, ESQ.</p> <p>10 Maron Marvel Bradley Anderson &</p> <p>11 Tardy, LLC</p> <p>12 12144 Southwick Circle</p> <p>13 Farragut, Tennessee 37934</p> <p>14 (865) 334-6468</p> <p>15 HJarvis@maronmarvel.com</p> <p>16</p> <p>17 CHAN E. MCLEOD, ESQ.</p> <p>18 Maron Marvel Bradley Anderson &</p> <p>19 Tardy, LLC</p> <p>20 1020 Highland Colony Parkway</p> <p>21 Suite 400</p> <p>22 Ridgeland, Mississippi 39157</p> <p>23 (601) 969-4247</p> <p>24 CMcLeod@maronmarvel.com</p> <p>25 THOMAS BIBBY, ESQ.</p> <p>26 (Via Telephone)</p> <p>27 Maron Marvel Bradley Anderson &</p> <p>28 Tardy, LLC</p> <p>29 1201 North Market Street</p> <p>30 Suite 900</p> <p>31 Wilmington, Delaware 19801</p> <p>32 (302) 472-1759</p> <p>33 TBibby@maronmarvel.com</p> <p>34 For The Witness: JAMES C. SPERRING, ESQ.</p> <p>35 Cumberland Litigation</p> <p>36 5005 Maryland Way</p> <p>37 Suite 225</p> <p>38 Brentwood, Tennessee 37027</p> <p>39 (615) 266-6976</p> <p>40 james@cumberlandlitigation.com</p> <p>41</p> <p>42 Also Present: John Richmond, Videographer</p> <p>43</p> <p>44</p> <p>45</p>	<p>1 Exhibit 10 Persistent Respiratory Symptoms in 27</p> <p>2 Clean-Up Workers Five Years After the</p> <p>3 Prestige Oil Spill</p> <p>4</p> <p>5 Exhibit 11 Heme Oxygenase-1 Protects Corexit 28</p> <p>6 9500A-Induced Respiratory Epithelial</p> <p>7 Injury Across Species (Front Page)</p> <p>8</p> <p>9 Exhibit 12 Heme Oxygenase-1 Protects Corexit 28</p> <p>10 9500A-Induced Respiratory Epithelial</p> <p>11 Injury Across Species (Full Article)</p> <p>12</p> <p>13 Exhibit 13 Office Notes from Dr. Wray 30</p> <p>14</p> <p>15 Exhibit 14 Statement 35</p> <p>16</p> <p>17 Exhibit 15 Statement 36</p> <p>18</p> <p>19 Exhibit 16 Review of Medical Records by Amy 40</p> <p>20 Elizabeth Bentley, M.D.</p> <p>21</p> <p>22 Exhibit 17 Billing Record 40</p> <p>23</p> <p>24</p> <p>25</p>

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<p>1 The videotaped deposition of CHARLES</p> <p>2 WRAY, M.D., was taken by counsel for the</p> <p>3 Defendants, at the offices of Cumberland</p> <p>4 Litigation, 5005 Maryland Way, Suite 225,</p> <p>5 Brentwood, Tennessee, on July 23, 2021 at</p> <p>6 1:41 p.m. for all purposes under the Federal Rules</p> <p>7 of Civil Procedure.</p> <p>8 It is agreed that Rhonda S. Nicholson,</p> <p>9 being a licensed stenographic court reporter and</p> <p>10 notary public for the State of Tennessee, may</p> <p>11 swear the witness, and that the reading and</p> <p>12 signing of the completed deposition by the witness</p> <p>13 were not waived.</p> <p>14</p> <p>15</p> <p>16 * * *</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p>1 you're about to give shall be the truth, the whole</p> <p>2 truth and nothing but the truth, so help you God?</p> <p>3 THE WITNESS: Yes.</p> <p>4 CHARLES WRAY, M.D.</p> <p>5 was called as a witness, and after having been</p> <p>6 first duly sworn, testified as follows:</p> <p>7 EXAMINATION</p> <p>8 BY MR. JARVIS:</p> <p>9 Q. Dr. Wray, we did have an opportunity to</p> <p>10 meet a few minutes ago. My name is Howard Jarvis.</p> <p>11 I'm going to ask you some questions today. Now, I</p> <p>12 want to have an understanding with you -- just a</p> <p>13 few ground rules. Some of which are designed to</p> <p>14 benefit you as the witness who is sitting here</p> <p>15 today. Okay?</p> <p>16 If I ask you a question and you do not</p> <p>17 understand that question, I need you to tell me</p> <p>18 today that you did not understand that question.</p> <p>19 Otherwise, everybody, including the Court and</p> <p>20 jury, will assume you did understand it. Is that</p> <p>21 fair enough?</p> <p>22 A. Yes.</p> <p>23 Q. Okay. You just did a nice job answering</p> <p>24 yes. Please -- if an answer calls for a yes or</p> <p>25 no, please say yes or no, and -- for this lady</p>
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<p>1 *** PROCEEDINGS ***</p> <p>2 THE VIDEOGRAPHER: We are on the</p> <p>3 record at 1:41 p.m. This is Friday, July the</p> <p>4 23rd, 2021. This is Media Unit 1 in the</p> <p>5 video-recorded deposition of Dr. Charles Wray</p> <p>6 taken by counsel for the defense.</p> <p>7 Counsel and all present in the room</p> <p>8 and everyone attending remotely, now state your</p> <p>9 appearance and affiliations for the record.</p> <p>10 MR. BURGER: Go ahead, sir.</p> <p>11 MR. JARVIS: Ken, I'll let you go</p> <p>12 first.</p> <p>13 MR. MCLEOD: Ken --</p> <p>14 MR. BURGER: Ken Burger for the</p> <p>15 plaintiff.</p> <p>16 MR. SPERRING: James Sperring here</p> <p>17 for Dr. Wray.</p> <p>18 MR. JARVIS: All right. Howard</p> <p>19 Jarvis -- and Tom Bibby is on the phone -- for BP.</p> <p>20 MR. MCLEOD: Chan McLeod on behalf of</p> <p>21 BP.</p> <p>22 THE VIDEOGRAPHER: Court Reporter,</p> <p>23 please swear in the witness.</p> <p>24 THE COURT REPORTER: Can you raise</p> <p>25 your right hand? Do you swear that the testimony</p>	<p>1 over here taking everything down -- versus a nod</p> <p>2 of your head or an uh-huh or a huh-uh.</p> <p>3 You and I would understand what's going</p> <p>4 on, but we want the record to be clear later on.</p> <p>5 Is that okay?</p> <p>6 A. Yes.</p> <p>7 Q. All right. Now, you have been identified</p> <p>8 as an expert witness for a gentleman named John</p> <p>9 Maas; is that correct?</p> <p>10 A. Yes.</p> <p>11 Q. All right. Now, Mr. Burger is here as</p> <p>12 Mr. Maas's deposition -- and has furnished to us a</p> <p>13 disclosure concerning Mr. Maas and his condition.</p> <p>14 You are aware of that?</p> <p>15 A. Yes.</p> <p>16 Q. Okay. Mr. Burger is the individual, the</p> <p>17 lawyer, who represents Mr. Maas, correct?</p> <p>18 A. Yes.</p> <p>19 Q. All right. We appreciate Mr. Sperring</p> <p>20 being here and making his facilities available to</p> <p>21 us, but we do need you to understand it's</p> <p>22 Mr. Burger who's defending this deposition. Is</p> <p>23 that okay with you?</p> <p>24 A. Yes.</p> <p>25 Q. All right. Now, we will -- depending on</p>

<p style="text-align: right;">Page 9</p> <p>1 how long we go, we will take a break whenever you 2 would like to take a break. We do run these 3 depositions according to the witnesses' desires. 4 But if we do take a break, number one, I 5 need you to answer any question pending before we 6 leave the room. Is that fair enough? 7 A. Yes. 8 Q. Okay. Number two, you have -- you are 9 under oath. And when you're under oath, you can't 10 talk to anybody about your testimony. Is that 11 understood? 12 A. Yes. 13 Q. All right. Thank you. Now, I have -- and 14 I believe you have -- some paperwork in front of 15 you. And if you could just tell us what you've 16 got right there. 17 A. I've got my medical records. I've got my 18 Rule 26 disclosure. I've got a few research 19 papers. And I've got the review of medical 20 records of John Maas by Dr. Bentley. 21 Q. Okay. Did -- first off, let's just say -- 22 the letter you have in front of you or the -- you 23 have medical records. You also wrote a letter. 24 Is your letter in those medical records? 25 A. Yes. My letter is here -- there, too.</p>	<p style="text-align: right;">Page 11</p> <p>1 MR. JARVIS: Okay. Miss Reporter, 2 would you mark this as Exhibit Number 1 to 3 Dr. Wray's deposition. 4 (Document marked Exhibit No. 1.) 5 MR. JARVIS: All right. Thank you, 6 ma'am. 7 BY MR. JARVIS: 8 Q. Now, does this disclosure contain all the 9 opinions that you are prepared to express in this 10 matter? 11 A. I'm not sure I understand the question. 12 Q. Okay. You have expressed an opinion in 13 this disclosure; is that correct? 14 A. Yes. 15 Q. Okay. Does this disclosure contain all of 16 the opinions you have to offer us in this matter? 17 A. I'm not sure. I -- I think it contains my 18 basic opinion. I'm still a little confused by the 19 question, but -- 20 Q. You -- you -- you have offered an opinion 21 about Mr. Maas's asthma, correct? 22 A. Correct. 23 Q. Okay. You offered an opinion about what 24 you believe to be the cause of his asthma; is that 25 correct?</p>
<p style="text-align: right;">Page 10</p> <p>1 Yes. 2 Q. Okay. Now, the expert disclosure, would 3 you put that in front of you, please? Did you 4 write this disclosure? 5 A. No. 6 Q. Okay. Was it furnished to you by counsel 7 for the plaintiff? 8 A. Yes. 9 Q. Okay. Have you signed that disclosure? 10 A. Yes. 11 Q. Okay. But you did not author it? 12 A. Correct. 13 MR. JARVIS: Let's make your 14 disclosure Exhibit Number 1. 15 And, Counsel for Folks -- I've got a 16 clean copy here, Miss Reporter -- which I don't 17 want to mislead you about anything. Can you -- if 18 you'll take a look at it and make sure I've given 19 you -- and that way you can keep your disclosure 20 in front of you, but I don't want to mislead you. 21 THE WITNESS: Yeah. It looks like 22 we're -- 23 MR. JARVIS: All right. 24 THE WITNESS: -- looking at the 25 same --</p>	<p style="text-align: right;">Page 12</p> <p>1 A. Yes. 2 Q. Okay. Do you have any other opinions to 3 express in this case other than that? 4 A. I guess right now, not -- not that I know 5 of. 6 Q. Okay. You had -- in your disclosure, you 7 said -- or in -- yeah. You said you had a draft 8 of something from Dr. Antony. Do you recall that? 9 A. Yes. 10 Q. Okay. Do you have that draft with you 11 here today? 12 A. I don't -- I don't think I have that here. 13 MR. JARVIS: Okay. Mr. Burger, we 14 would call for that to be produced as Late 15 Numbered Exhibit Number 2 to Dr. Wray's 16 deposition. 17 MR. BURGER: Yeah. We have no 18 objection to that. If I could -- I think that 19 probably is part of the -- a complete zip. 20 The same zip that I provided you, I 21 provided to Dr. Wray, if I could clarify that. 22 MR. JARVIS: The point, therefore, 23 being, Dr. Wray, you've got a little homework. 24 You've got to go find that and send it to 25 Mr. Burger, and he'll take care of furnishing it</p>

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<p>1 to our reporter. Is that fair enough?</p> <p>2 THE WITNESS: Sure.</p> <p>3 (Document marked Late-Filed Exhibit No. 2.)</p> <p>4 BY MR. JARVIS:</p> <p>5 Q. Okay. Now, Dr. Wray, do you know the</p> <p>6 concentration of any alleged exposure to Corexit</p> <p>7 by Mr. Maas?</p> <p>8 A. No.</p> <p>9 Q. Do you know the concentration of any</p> <p>10 alleged exposure to crude oil by Mr. Maas?</p> <p>11 A. No.</p> <p>12 Q. And you have not been furnished with any</p> <p>13 such concentrations, have you?</p> <p>14 A. Not that I'm aware of.</p> <p>15 Q. All right. You do not know whether any</p> <p>16 such concentration was more or less to either one</p> <p>17 of those products than 10 parts per million, do</p> <p>18 you?</p> <p>19 A. Don't know.</p> <p>20 Q. More or less than five parts per million?</p> <p>21 A. Don't know.</p> <p>22 Q. More or less than one part per million?</p> <p>23 A. Don't know.</p> <p>24 Q. More or less than one part per billion?</p> <p>25 A. Don't know.</p>	<p>1 Q. Okay. Do you have any other literature</p> <p>2 that she did not find, to your knowledge?</p> <p>3 A. No.</p> <p>4 Q. Okay. Have you undertaken any type of</p> <p>5 literature search yourself about Corexit?</p> <p>6 A. I don't -- not that I recall.</p> <p>7 Q. Okay. What about crude oil?</p> <p>8 A. No.</p> <p>9 Q. Dr. Wray, have you reviewed any publicly</p> <p>10 available information on the data compiled --</p> <p>11 compiled by any governmental agency with regard to</p> <p>12 Corexit and crude oil in the Gulf as a result of</p> <p>13 the Deepwater Horizon incident?</p> <p>14 A. I -- I don't think so. I mean, I think</p> <p>15 I've seen the -- the EPA sheet on it, but I don't</p> <p>16 think that's what you're talking about.</p> <p>17 Q. No. That being the MSDS for Corexit?</p> <p>18 A. Yes.</p> <p>19 Q. Okay. But you haven't gone to any of the</p> <p>20 websites that the government has with objective</p> <p>21 data?</p> <p>22 A. No.</p> <p>23 Q. Okay. You have not looked at any of the</p> <p>24 mapping data as to where Mr. Maas was in relation</p> <p>25 to the use of Corexit?</p>
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<p>1 Q. See how easy this is, Doctor? Which --</p> <p>2 you've got anything pressing we can get you out of</p> <p>3 here for?</p> <p>4 All right. Now, Dr. Wray, you are not an</p> <p>5 industrial hygienist? You are a board-certified</p> <p>6 pulmonologist, correct?</p> <p>7 A. Yes. Correct.</p> <p>8 Q. All right. And when I read your</p> <p>9 disclosure, I saw several different paragraphs</p> <p>10 where you depend upon the credibility of Mr. Maas</p> <p>11 as to the foundation of your opinion; is that</p> <p>12 correct?</p> <p>13 A. Yes.</p> <p>14 Q. Thank you. Dr. Wray, you are not a</p> <p>15 medical toxicologist?</p> <p>16 A. I am not.</p> <p>17 Q. Okay. Dr. Wray, you are not an</p> <p>18 epidemiologist?</p> <p>19 A. I am not.</p> <p>20 Q. Okay. Dr. Wray, in looking at the zip</p> <p>21 file that you did produce, it is my understanding</p> <p>22 you rely upon Dr. Antony for finding any</p> <p>23 literature that may be applicable; is that</p> <p>24 correct?</p> <p>25 A. For the most part. Yes.</p>	<p>1 A. No.</p> <p>2 Q. Okay. Doctor, it's a -- it's a sensitive</p> <p>3 subject for all of us in this day and age. But</p> <p>4 Mr. Maas is morbidly obese; is that correct?</p> <p>5 A. Can I look at my record?</p> <p>6 Q. Yes, sir. You sure can. And I've got</p> <p>7 them here, too, if you need them.</p> <p>8 A. I don't -- I've got his BMI as 36,</p> <p>9 which -- which is obese, but I think not morbidly</p> <p>10 obese.</p> <p>11 Q. Okay. What do you think is morbidly</p> <p>12 obese?</p> <p>13 A. Over 40.</p> <p>14 Q. Over 40. But 36 BMI for a man five nine,</p> <p>15 that's not very good, is it?</p> <p>16 A. That's obese.</p> <p>17 Q. Yeah. And obesity leads to a variety of</p> <p>18 health problems, does it not?</p> <p>19 A. It can.</p> <p>20 Q. Okay. Is asthma one of the health</p> <p>21 problems associated with obesity according to all</p> <p>22 of the scientific literature?</p> <p>23 A. I don't know the answer to that question.</p> <p>24 Q. Okay. You have not researched that</p> <p>25 yourself?</p>

<p style="text-align: right;">Page 17</p> <p>1 A. Correct. Yes. I have not.</p> <p>2 Q. Okay. All right. Doctor, can you show me</p> <p>3 in the medical records you have in front of you</p> <p>4 where you performed a differential diagnosis with</p> <p>5 regard to the diagnosis of asthma that you made as</p> <p>6 to the cause?</p> <p>7 A. I don't -- I don't think so, but I can --</p> <p>8 I don't know that I really discussed it in the</p> <p>9 medical records. When I first saw him, we -- we</p> <p>10 got some breathing tests, and we ordered a CT scan</p> <p>11 to look to see if there might be anything else</p> <p>12 going on that might account for his shortness of</p> <p>13 breath. So there were some different thoughts</p> <p>14 running through my head, but -- but ultimately, I</p> <p>15 think asthma was --</p> <p>16 Q. You made the diagnosis?</p> <p>17 A. Correct.</p> <p>18 Q. Okay. I guess I need to clarify. As a</p> <p>19 differential diagnosis as to the causation of his</p> <p>20 asthma, can you show me where you did that in his</p> <p>21 medical records? And I do know --</p> <p>22 A. Yeah.</p> <p>23 Q. And I do know he gave you the history.</p> <p>24 A. Right. No. I don't think there's</p> <p>25 anywhere in my medical records that shows that.</p>	<p style="text-align: right;">Page 19</p> <p>1 doctor about things like that.</p> <p>2 The -- and I'll tell you a funny story if</p> <p>3 we have enough time about Jarvis and picocuries</p> <p>4 per gram.</p> <p>5 But you prescribe medication by dose, do</p> <p>6 you not?</p> <p>7 A. Yes.</p> <p>8 Q. And that includes also the duration of how</p> <p>9 long you want somebody to be on the drug?</p> <p>10 A. Yeah. Oftentimes with inhalers, it's --</p> <p>11 people are going to be on them indefinitely,</p> <p>12 but --</p> <p>13 Q. And it includes a -- I call that the</p> <p>14 duration. Is that -- is that a fair enough</p> <p>15 expression?</p> <p>16 A. How long --</p> <p>17 Q. Yes.</p> <p>18 A. -- I want them to take it?</p> <p>19 Q. Yeah.</p> <p>20 A. Yes.</p> <p>21 Q. Okay. And then the nature of it is</p> <p>22 also -- what you're doing to make sure it has a</p> <p>23 positive effect on your patient; is that correct?</p> <p>24 A. Yes.</p> <p>25 Q. Okay. And one of the reasons we prescribe</p>
<p style="text-align: right;">Page 18</p> <p>1 Q. Okay. Do you have any type of</p> <p>2 differential diagnosis in the disclosure on the</p> <p>3 causation side?</p> <p>4 A. Don't believe so.</p> <p>5 Q. Okay. Doctor, what are the drugs that you</p> <p>6 have prescribed for Mr. Maas in your treatment of</p> <p>7 him?</p> <p>8 A. Initially, I put him on Breo, and he</p> <p>9 was -- he was already on Albuterol, which we</p> <p>10 continued. And it looks like he was -- he was on</p> <p>11 Singulair as well, and I think that is it.</p> <p>12 Q. Now, Albuterol is a traditional drug used</p> <p>13 to treat asthma?</p> <p>14 A. Yes.</p> <p>15 Q. Okay. And it's given by dose?</p> <p>16 A. What do you mean by that?</p> <p>17 Q. Well, a certain amount of Albuterol, i.e.</p> <p>18 the dose being milligrams; is that correct?</p> <p>19 A. Or micrograms usually.</p> <p>20 Q. Micrograms.</p> <p>21 A. Yeah.</p> <p>22 Q. I'm so sorry.</p> <p>23 A. That's okay.</p> <p>24 Q. Micrograms. Well, this is what happens</p> <p>25 when you're a history major talking to a medical</p>	<p style="text-align: right;">Page 20</p> <p>1 medication by dose is because you as a medical</p> <p>2 doctor need to know how much and for how long a</p> <p>3 time to know if it's going to have an effect on</p> <p>4 the condition you are attempting to treat; is that</p> <p>5 correct?</p> <p>6 A. Yes.</p> <p>7 Q. Okay. Doctor, he, to your knowledge, was</p> <p>8 not diagnosed with asthma until 2015 by</p> <p>9 Dr. Henson?</p> <p>10 A. That's my understanding.</p> <p>11 Q. Okay. And Dr. Henson also at that point</p> <p>12 in time prescribed the same drugs that you have</p> <p>13 prescribed for him?</p> <p>14 A. I don't know if I know the answer to that.</p> <p>15 Q. All right. Dr. Henson's records would be</p> <p>16 where we'd need to find that answer, correct?</p> <p>17 A. I guess so.</p> <p>18 Q. Yeah. The drugs that you have prescribed,</p> <p>19 though, are very commonly used to treat patients</p> <p>20 with asthma?</p> <p>21 A. Yes.</p> <p>22 Q. You mentioned an inhaler. I had a</p> <p>23 daughter who even played college soccer, and the</p> <p>24 NCAA had to double-check her inhaler during her</p> <p>25 era of playing in the late 2000s. Because it is a</p>

<p style="text-align: right;">Page 21</p> <p>1 drug designed to treat asthma, correct? 2 A. Well, I don't -- I don't know what the 3 inhaler was, but I -- 4 Q. Right. Yes. I gotcha. Now, Doctor, 5 Mr. Maas has told us that he has been obese for 6 many, many years. And you don't dispute that, do 7 you? 8 A. I don't dispute it. I -- I don't know if 9 it's true or not, but I wouldn't dispute it. 10 Q. Okay. Did you look at any other medical 11 records pertaining to Mr. Maas besides maybe 12 Dr. Henson's records? 13 A. I -- I really can't remember. I don't -- 14 I'm not sure that I saw records from Henson. 15 There may have been -- there may have been some 16 records from his nurse practitioner. 17 Q. Is that Ms. Thompson? 18 A. I think it was -- yes. 19 Q. Did he ever tell you he had received 20 treatment for asthma before 2015? 21 A. No. I don't believe he told me that. 22 Q. Okay. You -- you also have in front of 23 you -- it looks like an article to me. 24 A. Yes. 25 Q. All right. And could you just tell us</p>	<p style="text-align: right;">Page 23</p> <p>1 THE WITNESS: Well, these are all -- 2 these are all just the -- 3 MR. JARVIS: Are those the front 4 pages? 5 THE WITNESS: These are just the 6 front pages of -- 7 MR. JARVIS: Oh, okay. 8 THE WITNESS: Yeah. Sorry. 9 There's different ones. 10 MR. JARVIS: Oh, no. Don't -- don't 11 worry about it, you know. 12 THE WITNESS: Yeah. These are mostly 13 just the front page, and I think we have -- I 14 think it's the full article, "Heme Oxygenase-1 15 Protects Corexit-Induced Respiratory Epithelial 16 Injury Across Species," but the rest of them are 17 just kind of the abstracts. 18 MR. JARVIS: Okay. Well, let's -- 19 all right. We're going to make -- the first one 20 you read from is going to be Exhibit 3 or the 21 title you gave us of the first page. 22 THE WITNESS: Uh-huh. 23 MR. JARVIS: Court Reporter marked 24 it. 25 BY MR. JARVIS:</p>
<p style="text-align: right;">Page 22</p> <p>1 what that article is? 2 A. Well, there -- I think there -- 3 Q. Are -- 4 A. -- are several here. 5 Q. Yes. There are. I apologize. 6 A. But the one on top, "Respiratory, Dermal, 7 and Eye Irritation Symptoms Associated with 8 Corexit Following the Deepwater Horizon Oil Spill: 9 Findings From the Gulf Study." 10 Q. Is -- is Dr. Antony one of the secondary 11 authors on that particular study? 12 A. No. 13 MR. JARVIS: Okay. All right. Let's 14 just mark that one, though, as Exhibit Number 2. 15 I don't have that one. You'll get all this 16 back -- 17 THE WITNESS: Okay. 18 MR. JARVIS: -- you know -- or make 19 that Number 3. I'm sorry. So we'll make that 20 Exhibit Number 3, Miss Reporter. 21 (Document marked Exhibit No. 3.) 22 MR. JARVIS: And we need a paper clip 23 to hold that together? 24 THE COURT REPORTER: Yes. Is this 25 the whole thing?</p>	<p style="text-align: right;">Page 24</p> <p>1 Q. What's the second one you've got there in 2 front of you, Doc? 3 A. "The Impact of the Deepwater Horizon Oil 4 Spill Upon Lung Health. Mouse-Based DNA [sic] 5 Sequence Analysis." 6 MR. JARVIS: Okay. We're going to 7 make that Number 4, Miss Reporter. 8 (Document marked Exhibit No. 4.) 9 BY MR. JARVIS: 10 Q. And once again, it's just the first page 11 of -- of these articles, correct, Doctor? 12 A. Correct. 13 Q. Okay. And when I say that, it's just so 14 that all of us, when we read this thing, including 15 you, after the fact, will have as complete a 16 record as the little ol' boy from Knoxville, 17 Tennessee, could come up with for us. Okay? Fair 18 enough? 19 A. Understood. 20 Q. Okay. What have you got next? 21 A. "The Development of Long-Term Adverse 22 Health Effects in Oil Spill Cleanup Workers of the 23 Deepwater Horizon Offshore Drilling Rig Disaster." 24 MR. JARVIS: Okay. And is that -- 25 let's make that Exhibit Number 5, Miss Reporter.</p>

Page 25	Page 27
<p>1 (Document marked Exhibit No. 5.)</p> <p>2 BY MR. JARVIS:</p> <p>3 Q. What have you got next?</p> <p>4 A. "Comparative Toxicity of Two Oil</p> <p>5 Dispersants, Super Dispersant-25 and Corexit 9527,</p> <p>6 to a Range of Coastal Species."</p> <p>7 MR. JARVIS: Okay. Let's make that</p> <p>8 Number 6. Is that right, Miss Reporter?</p> <p>9 (Document marked Exhibit No. 6.)</p> <p>10 BY MR. JARVIS:</p> <p>11 Q. What have you got next, Doctor?</p> <p>12 A. "Evaluation of Pulmonary and Systemic</p> <p>13 Toxicity of Oil Dispersant, Corexit EC9500A,</p> <p>14 Following Acute Repeated Inhalation Exposure."</p> <p>15 MR. JARVIS: Okay. And that will be</p> <p>16 Exhibit 7.</p> <p>17 (Document marked Exhibit No. 7.)</p> <p>18 BY MR. JARVIS:</p> <p>19 Q. Now, I notice on several of these -- both</p> <p>20 have been marked and a couple we're getting to</p> <p>21 mark -- there's highlighting. Is that your</p> <p>22 highlighting?</p> <p>23 A. No. I don't think so.</p> <p>24 Q. Okay. Let's make -- what's the next</p> <p>25 you've got, sir?</p>	<p>1 That may be about as hard as doing the typing</p> <p>2 sometimes.</p> <p>3 BY MR. JARVIS:</p> <p>4 Q. What have you got next?</p> <p>5 A. "Persistent Respiratory Symptoms in</p> <p>6 Clean-Up Workers Five Years After the Prestige Oil</p> <p>7 Spill."</p> <p>8 Q. Okay. Now, that's -- that's a different</p> <p>9 oil spill, correct?</p> <p>10 A. Correct.</p> <p>11 MR. JARVIS: Okay. We're going to</p> <p>12 make that Number --</p> <p>13 THE COURT REPORTER: 10.</p> <p>14 MR. JARVIS: 10.</p> <p>15 (Document marked Exhibit No. 10.)</p> <p>16 BY MR. JARVIS:</p> <p>17 Q. Another reason I went to law school,</p> <p>18 Doctor, is I can only count up so high. Okay.</p> <p>19 It's sort of foreign to me.</p> <p>20 Now, what have you got next?</p> <p>21 A. "Heme Oxygenase-1 Protects Corexit</p> <p>22 9500A-Induced Respiratory Epithelial Injury Across</p> <p>23 Species."</p> <p>24 MR. JARVIS: Okay. All right. Let's</p> <p>25 make that Number 11, Miss Reporter.</p>
Page 26	Page 28
<p>1 A. "The Impact of Oil Spill to Lung Health.</p> <p>2 Insights From an RNA-Sequence Study of Human</p> <p>3 Airway Epithelial Cells."</p> <p>4 MR. JARVIS: Okay. And we'll make</p> <p>5 that Exhibit 8, Miss Reporter.</p> <p>6 (Document marked Exhibit No. 8.)</p> <p>7 BY MR. JARVIS:</p> <p>8 Q. And once again so the record is clear,</p> <p>9 we're just making the front page -- because that's</p> <p>10 what you've brought with you today, and -- but</p> <p>11 you'll -- you -- you know these articles, right?</p> <p>12 You know what I'm talking about?</p> <p>13 A. I -- I know -- I know what you're</p> <p>14 referencing.</p> <p>15 Q. Okay. Good deal. What have you got next?</p> <p>16 A. "Oil Dispersants Used in Gulf Oil Spill</p> <p>17 Causes Lung and Gill Injuries to Humans and</p> <p>18 Aquatic Animals. Also Identifies Protective</p> <p>19 Enzyme."</p> <p>20 MR. JARVIS: Okay. Make that Exhibit</p> <p>21 Number 9.</p> <p>22 (Document marked Exhibit No. 9.)</p> <p>23 MR. JARVIS: One of the talents of</p> <p>24 being a reporter is looking for the place on a</p> <p>25 piece of paper you can actually put the sticker.</p>	<p>1 (Document marked Exhibit No. 11.)</p> <p>2 BY MR. JARVIS:</p> <p>3 Q. And next.</p> <p>4 A. This is the same article. This is just a</p> <p>5 full article instead of just the front page.</p> <p>6 MR. JARVIS: Okay. Then we'll make</p> <p>7 that Number 12.</p> <p>8 (Document marked Exhibit No. 12.)</p> <p>9 BY MR. JARVIS:</p> <p>10 Q. And is that Dr. Antony's article?</p> <p>11 A. Yes.</p> <p>12 Q. Okay. And so you defer to her about any</p> <p>13 comments about the article on which she says she</p> <p>14 was a secondary author?</p> <p>15 A. Definitely. Yes.</p> <p>16 Q. Okay. Because the -- from a searching</p> <p>17 standpoint, you didn't do an epidemiological</p> <p>18 literature search, did you?</p> <p>19 A. No.</p> <p>20 Q. Okay. And you do not have a Ph.D. in</p> <p>21 epidemiology?</p> <p>22 A. No.</p> <p>23 Q. Okay. All right. Now, you have</p> <p>24 Dr. Bentley's disclosure in front of you, I</p> <p>25 believe?</p>

<p style="text-align: right;">Page 29</p> <p>1 A. Yes.</p> <p>2 Q. Okay. What is the significance for you of</p> <p>3 having Dr. Bentley's disclosure in front of you?</p> <p>4 A. I'm not -- I guess I'm not sure I</p> <p>5 understand the question.</p> <p>6 Q. Okay.</p> <p>7 A. Why did I bring it?</p> <p>8 Q. Yeah. Why did you bring it?</p> <p>9 A. Just to have everything I've looked at</p> <p>10 with me.</p> <p>11 Q. Okay. You have -- so you have looked at</p> <p>12 Dr. Bentley's disclosure?</p> <p>13 A. Briefly.</p> <p>14 Q. Briefly. You -- you don't have any basis</p> <p>15 of disputing what she says?</p> <p>16 A. Well, I mean, I've seen the patient. It</p> <p>17 looks like she's looked over the patient's</p> <p>18 records. My general sense was we reached</p> <p>19 different conclusions.</p> <p>20 Q. Okay. You saw Mr. Maas twice in person</p> <p>21 and once by telemedicine?</p> <p>22 A. Let me look back. Once in person. Twice</p> <p>23 in person. Three times in person.</p> <p>24 Q. Three times in person. I apologize to</p> <p>25 you.</p>	<p style="text-align: right;">Page 31</p> <p>1 MR. JARVIS: By the way, Miss</p> <p>2 Reporter, I'm going to hand across to you Exhibit</p> <p>3 1 so that I don't walk out of here with it. Okay.</p> <p>4 Now, Dr. Wray, may I have your</p> <p>5 indulgence if I step out for a few minutes with my</p> <p>6 buddy here on my right? And we'll see where this</p> <p>7 is and where maybe we need to go?</p> <p>8 THE WITNESS: All right.</p> <p>9 MR. JARVIS: And anything that</p> <p>10 expedites it is okay with you?</p> <p>11 THE WITNESS: Fine with me.</p> <p>12 MR. JARVIS: All right. We're off</p> <p>13 the record.</p> <p>14 THE VIDEOGRAPHER: We are going off</p> <p>15 the record at 2:08 p.m.</p> <p>16 (Recess, 2:08 to 2:13 p.m.)</p> <p>17 THE VIDEOGRAPHER: We are back on the</p> <p>18 record at 2:13.</p> <p>19 BY MR. JARVIS:</p> <p>20 Q. Dr. Wray, in -- in looking at</p> <p>21 Dr. Bentley's expert disclosure, did you see that</p> <p>22 she referenced billing records from 2002 for</p> <p>23 Mr. Maas?</p> <p>24 A. I do not remember seeing that.</p> <p>25 Q. Okay. You have not seen billing records</p>
<p style="text-align: right;">Page 30</p> <p>1 A. And once by telemedicine.</p> <p>2 Q. When was the last time you actually saw</p> <p>3 Mr. Maas?</p> <p>4 A. November 2020.</p> <p>5 Q. Okay. Do you have any presently scheduled</p> <p>6 appointments to see him?</p> <p>7 A. I'm not sure. In November, we were</p> <p>8 supposed to have a follow-up visit in six months.</p> <p>9 And I'm not -- not sure if he's on the schedule</p> <p>10 currently or not.</p> <p>11 Q. Okay. You were talking about having a</p> <p>12 six-month visit. But whether that is on the</p> <p>13 schedule or not, you have not seen him since</p> <p>14 November of 2020?</p> <p>15 A. Correct.</p> <p>16 Q. Okay. And you brought with you your</p> <p>17 complete medical file on him, your notes and</p> <p>18 whatnot?</p> <p>19 A. All of my office notes. Yes.</p> <p>20 Q. That's -- that's -- I should have phrased</p> <p>21 it that way. So I apologize.</p> <p>22 MR. JARVIS: Let's make that Exhibit</p> <p>23 Number 13, which is the office notes from</p> <p>24 Dr. Wray.</p> <p>25 (Document marked Exhibit No. 13.)</p>	<p style="text-align: right;">Page 32</p> <p>1 from 2002 for Mr. Maas?</p> <p>2 A. Not that I know of.</p> <p>3 MR. JARVIS: Okay. I have in front</p> <p>4 of me, Mr. Burger, records that have been produced</p> <p>5 from Memorial Hospital in Gulfport, Mississippi.</p> <p>6 And it starts at the Master Medical on the Bates</p> <p>7 stamping of 22_001709.</p> <p>8 BY MR. JARVIS:</p> <p>9 Q. And let me just show you a couple of</p> <p>10 things, you know, for you to take a look at if you</p> <p>11 don't mind. Okay?</p> <p>12 A. Okay.</p> <p>13 Q. All right. I am going to show you a sheet</p> <p>14 that is 22_001712. Let me walk down here and show</p> <p>15 it to Mr. Burger first because that's only fair.</p> <p>16 MR. BURGER: I appreciate that. I</p> <p>17 think I've seen it before, but I appreciate you --</p> <p>18 MR. JARVIS: All right. It is -- it</p> <p>19 is part of --</p> <p>20 MR. BURGER: What you provided to me.</p> <p>21 That's right.</p> <p>22 MR. JARVIS: And there will just be</p> <p>23 several of these, Mr. Burger, that we'll go</p> <p>24 through, and we'll see kind of where we are.</p> <p>25 MR. BURGER: Yeah. I've got no</p>

<p style="text-align: right;">Page 33</p> <p>1 problem with that.</p> <p>2 MR. JARVIS: All right. Thank you.</p> <p>3 BY MR. JARVIS:</p> <p>4 Q. Okay. You don't fix knees, do you?</p> <p>5 A. You would not want me operating on your --</p> <p>6 Q. Well, maybe Mr. Sperring wouldn't want you</p> <p>7 operating on me. I -- I need a new one. You got</p> <p>8 any hanging around I can get here at outpatient</p> <p>9 and get home to Knoxville this afternoon?</p> <p>10 Doctor, I just rattled this off. It</p> <p>11 is -- these are statements and billing records</p> <p>12 from the hospital I referenced. This is</p> <p>13 22_001712. I call your attention to what I am</p> <p>14 highlighting right now on this and ask if you will</p> <p>15 take a look at this particular document.</p> <p>16 A. Okay.</p> <p>17 Q. All right. And this document referenced</p> <p>18 that the patient is John Maas, correct?</p> <p>19 A. Correct.</p> <p>20 Q. Okay. Would you please look at what I've</p> <p>21 highlighted and read that into the record?</p> <p>22 A. "Sputum induction. Aerosol treatment HHN</p> <p>23 subsequent. Oxygen charge, one hour. Aerosol</p> <p>24 treatment HHN subsequent."</p> <p>25 Q. Okay. And would you read to the left the</p>	<p style="text-align: right;">Page 35</p> <p>1 Q. Okay.</p> <p>2 A. If your oxygen levels are low.</p> <p>3 Q. All right. Now, you do this sort of thing</p> <p>4 for treating asthma, don't you, Doctor?</p> <p>5 A. Yes.</p> <p>6 Q. Okay. And you've done it in the case of</p> <p>7 Mr. Maas, haven't you?</p> <p>8 A. Yes. This looks like this was probably a</p> <p>9 nebulized treatment where you're breathing in the</p> <p>10 mist. I don't think I prescribed that for him,</p> <p>11 but --</p> <p>12 Q. Okay. But these are the type treatments</p> <p>13 you yourself use?</p> <p>14 A. I -- I do prescribe these for some people</p> <p>15 with asthma.</p> <p>16 MR. JARVIS: Okay. All right. Let's</p> <p>17 make that the next numbered exhibit, Miss</p> <p>18 Reporter. 14?</p> <p>19 THE COURT REPORTER: 14.</p> <p>20 (Document marked Exhibit No. 14.)</p> <p>21 BY MR. JARVIS:</p> <p>22 Q. Doctor, I'm going to hand to you another</p> <p>23 page with -- which is a continuation of what you</p> <p>24 just read from, 22_001713, and ask if you would</p> <p>25 read into the record what I have highlighted,</p>
<p style="text-align: right;">Page 34</p> <p>1 date?</p> <p>2 A. So the sputum induction was August 1st,</p> <p>3 2002. Aerosol treatment HHN subsequent,</p> <p>4 August 1st, 2002. Oxygen charge, one hour,</p> <p>5 August 1st, 2002. Aerosol treatment HHN</p> <p>6 subsequent, August 1st, 2002.</p> <p>7 Q. All right. These are treatments for</p> <p>8 asthma, are they not, Doctor?</p> <p>9 MR. BURGER: Object to --</p> <p>10 THE WITNESS: I -- I don't --</p> <p>11 MR. BURGER: I need to object to the</p> <p>12 form, but you can go ahead and answer as best you</p> <p>13 can.</p> <p>14 BY MR. JARVIS:</p> <p>15 Q. Go ahead and answer.</p> <p>16 A. I -- I don't know what they were treatment</p> <p>17 for.</p> <p>18 Q. Those are what -- those are treatments</p> <p>19 that are used for asthma, though, aren't they?</p> <p>20 A. The -- there are aerosols that are used to</p> <p>21 treat asthma.</p> <p>22 Q. Okay. All right. Now, we have more in</p> <p>23 that -- and -- and, you know, oxygen gets --</p> <p>24 treated for asthma, isn't it?</p> <p>25 A. Can be.</p>	<p style="text-align: right;">Page 36</p> <p>1 including the date, please, sir.</p> <p>2 A. The date is August 1st, 2002. "Aerosol</p> <p>3 treatment HHN subsequent. Nebulizer handheld</p> <p>4 medication. Aerosol treatment HHN subsequent.</p> <p>5 Oxygen charge, one hour. Aerosol treatment HHN</p> <p>6 initial. Sputum induction. Metered dose inhaler</p> <p>7 assist. Metered dose with spacer panel. Aerosol</p> <p>8 treatment HHN subsequent. Aerosol treatment with</p> <p>9 neb panel."</p> <p>10 Q. Okay. Once again, these are treatments</p> <p>11 that you yourself will use for asthma, correct?</p> <p>12 A. Yes.</p> <p>13 MR. JARVIS: Okay. Let's make that</p> <p>14 the next numbered exhibit, Miss Reporter.</p> <p>15 (Document marked Exhibit No. 15.)</p> <p>16 BY MR. JARVIS:</p> <p>17 Q. You know, actually, Doctor, this is just</p> <p>18 because you can help me understand something. In</p> <p>19 this day of electronic record-keeping, we kind of</p> <p>20 start from the last date backwards back to the</p> <p>21 front, right?</p> <p>22 I mean, you know, August back to the date</p> <p>23 I'm getting ready to show you. That's not</p> <p>24 uncommon in this day and age. That's not a</p> <p>25 terribly good question, is it? Have I left you</p>

<p style="text-align: right;">Page 37</p> <p>1 and me both totally confused? Not -- not to --</p> <p>2 Mr. Burger because he's always a lot smarter than</p> <p>3 I am, but, you know --</p> <p>4 In other words, it starts and runs from</p> <p>5 the -- backwards forward, right -- is that how it</p> <p>6 works -- or forward backwards?</p> <p>7 A. I'm not sure.</p> <p>8 Q. You're smart enough to let somebody else</p> <p>9 screw with that at your office, aren't you,</p> <p>10 Dr. Wray?</p> <p>11 A. Exactly.</p> <p>12 Q. Gotcha. All right. I'm going to show you</p> <p>13 22_001714. Ask you to read the dates and the</p> <p>14 treatments into the record, please. Also part of</p> <p>15 the record of Mr. Maas, I will represent to you.</p> <p>16 A. Date is June 17, 2002. "Aerosol treatment</p> <p>17 HHN subsequent. Aerosol treatment HHN initial.</p> <p>18 Sputum induction. Nebulizer handheld medication."</p> <p>19 Now -- now the date is June 16, 2002.</p> <p>20 "Sputum induction. Oxygen charge, one hour.</p> <p>21 Aerosol treatment HHN subsequent."</p> <p>22 Date is now June 15, 2002. "Oxygen</p> <p>23 charge, one hour. Aerosol treatment HHN</p> <p>24 subsequent."</p> <p>25 Q. Okay. Once again, these are treatments</p>	<p style="text-align: right;">Page 39</p> <p>1 Q. Do you know he's also a Vanderbilt grad?</p> <p>2 A. I did not know that.</p> <p>3 Q. What about Dr. John Sullivan, a medical</p> <p>4 toxicologist?</p> <p>5 A. Not to my knowledge.</p> <p>6 Q. Dr. Allison Stock, a Ph.D. epidemiologist?</p> <p>7 A. Not to my knowledge.</p> <p>8 Q. Dr. Dana Hollins, a certified industrial</p> <p>9 hygienist?</p> <p>10 A. Not to my knowledge.</p> <p>11 Q. And you have not been furnished a report</p> <p>12 from any industrial hygienist on behalf of</p> <p>13 Mr. Maas, have you?</p> <p>14 A. No.</p> <p>15 Q. You have not gone beyond what Mr. Maas</p> <p>16 told you about working to look at the actual</p> <p>17 details and the facts of what he did or did not do</p> <p>18 as part of the VOO program?</p> <p>19 A. That's correct. Is -- was that the</p> <p>20 cleanup program?</p> <p>21 Q. Yes.</p> <p>22 A. Correct.</p> <p>23 Q. Vehicles [sic] of Opportunity, I believe</p> <p>24 is what it --</p> <p>25 A. Okay.</p>
<p style="text-align: right;">Page 38</p> <p>1 that you yourself use for asthma?</p> <p>2 A. Yes.</p> <p>3 Q. Okay. And they do predate the time of the</p> <p>4 alleged exposure, correct?</p> <p>5 A. Yes.</p> <p>6 Q. Okay. Doctor, have -- have you ever</p> <p>7 advised Mr. Maas not to smoke marijuana because</p> <p>8 that's an irritant if you have asthma?</p> <p>9 A. I have not.</p> <p>10 Q. Okay. Have you seen that Dr. Henson</p> <p>11 advised him not to smoke marijuana?</p> <p>12 A. I did not see that.</p> <p>13 Q. Okay. But if it's in Dr. Henson's</p> <p>14 records, you would not dispute what Dr. Henson</p> <p>15 says?</p> <p>16 A. I would have no reason to dispute it.</p> <p>17 Q. Do you know Dr. Henson over in Cookeville?</p> <p>18 A. I don't think so.</p> <p>19 Q. Okay. Well, there's probably a little bit</p> <p>20 more than one pulmonologist in -- in Knoxville. I</p> <p>21 mean -- Knoxville -- Nashville, I would say?</p> <p>22 A. Yes.</p> <p>23 Q. Okay. Did you review the disclosure of</p> <p>24 Dr. Robert Aris, a pulmonologist at Chapel Hill?</p> <p>25 A. I don't believe so.</p>	<p style="text-align: right;">Page 40</p> <p>1 Q. -- stands. VOO. So you have not looked</p> <p>2 at anything to go beyond what he told you?</p> <p>3 A. Correct.</p> <p>4 Q. Okay. Have you gone through --</p> <p>5 MR. JARVIS: Oh. Let's pull out --</p> <p>6 let's mark Dr. Bentley's disclosure that Dr. Wray</p> <p>7 brought along, please, Miss Reporter, as whatever</p> <p>8 the next numbered exhibit would be.</p> <p>9 (Document marked Exhibit No. 16.)</p> <p>10 BY MR. JARVIS:</p> <p>11 Q. So we've now looked at --</p> <p>12 MR. JARVIS: And this billing record</p> <p>13 is the next numbered exhibit, too. I'm sorry.</p> <p>14 The one that Dr. Wray just read from.</p> <p>15 (Document marked Exhibit No. 17.)</p> <p>16 BY MR. JARVIS:</p> <p>17 Q. Now, have we looked at everything you</p> <p>18 brought to share with us today?</p> <p>19 A. I think so. Yes.</p> <p>20 Q. Okay. Would you please take a look at</p> <p>21 your expert disclosure again? I believe that --</p> <p>22 that's a copy right there. I think that's your</p> <p>23 copy, I believe, because the other one, Miss</p> <p>24 Reporter has it.</p> <p>25 MR. JARVIS: In fact, if I could have</p>

<p style="text-align: right;">Page 41</p> <p>1 Exhibit 1 back, Miss Reporter, that would be 2 helpful. Dr. Wray is going to take care of me 3 because he says, Anything that will shut you up, 4 Jarvis, and get you out of here quick, I'm going 5 to -- I'm going to help you with. 6 MR. MCLEOD: Or in this case -- 7 MR. JARVIS: Oh. 8 THE WITNESS: Oh, it's over there. 9 MR. JARVIS: I've got it. 10 THE WITNESS: Okay. All right. 11 MR. JARVIS: Your attorney was trying 12 to hide it from me to shut me up quicker. 13 BY MR. JARVIS: 14 Q. All right. Would you please turn to 15 Paragraph 3 in your disclosure, which is Page 2? 16 Do you see where I am? 17 A. Yes. 18 Q. Okay. Certain language is in bold. Do 19 you see that? 20 A. Yes. 21 Q. Okay. Did you put that in bold or 22 somebody put it in bold for you from Mr. Burger's 23 office? 24 A. Somebody else put it in bold. 25 Q. Okay. Did you request it be in bold?</p>	<p style="text-align: right;">Page 43</p> <p>1 Q. Okay. Do members of the general 2 population who are obese without exposure to 3 Corexit develop asthma? 4 A. Yes. 5 Q. Do you have patients who have not had any 6 alleged exposure to Corexit who are obese and who 7 have asthma? 8 A. Yes. 9 Q. Okay. Have you ever told any of them that 10 they should lose weight? 11 A. Yes. 12 Q. Okay. Have you advised Mr. Maas that he 13 should lose weight? 14 A. I hope so. Let me -- I -- I don't know 15 the answer to that. I -- I suspect I have 16 mentioned it to him, but I don't find it in my 17 notes to know for sure. 18 Q. As you told me earlier, obesity leads to 19 many health problems, correct? 20 A. Yes. 21 Q. Okay. It leads to heart issues? 22 A. Correct. 23 Q. Hypertension? 24 A. Correct. 25 Q. It leads to -- it can lead to orthopedic</p>
<p style="text-align: right;">Page 42</p> <p>1 A. No. 2 Q. All right. But you did not write it? 3 A. Correct. 4 Q. Go to Page 4. And I believe this would be 5 toward the end of what is Paragraph 5, Dr. Wray. 6 There is language in bold there, "If Mr. Maas is 7 correct." Do you see where I am? 8 A. Yes. 9 Q. Okay. That is not your writing? 10 A. That's correct. 11 Q. You did not ask that it be put in bold? 12 A. Correct. 13 Q. But you signed off on it? 14 A. Correct. 15 Q. Okay. And your -- your disclosure is five 16 pages with a couple of attachments, including your 17 CV, correct? 18 A. Correct. 19 Q. Okay. Dr. Wray, do members of the general 20 population without exposure to Corexit develop 21 asthma? 22 A. Say it one more time. 23 Q. Do members of the general population 24 without exposure to Corexit develop asthma? 25 A. Yes.</p>	<p style="text-align: right;">Page 44</p> <p>1 problems? 2 A. Correct. 3 Q. Are you looking at my stomach? 4 A. I am not. 5 Q. And I talked about this knee -- 6 I am not. 7 Q. -- I told you about. Well, you probably 8 should because my internist does. 9 MR. JARVIS: Okay. I want another 10 couple of minutes with your indulgence, if I may, 11 because -- and if you want to take time to run to 12 the restroom real quickly, please feel free to do 13 so. 14 THE WITNESS: I'm -- I'm good. 15 MR. JARVIS: You're good. All right. 16 THE VIDEOGRAPHER: We're going off 17 the record at 2:29. 18 (Recess, 2:29 to 2:36 p.m.) 19 THE VIDEOGRAPHER: We are back on the 20 record at 2:36. 21 MR. JARVIS: Dr. Wray, thank you very 22 much for being here today and being very patient. 23 We appreciate you, and our questioning is at an 24 end. 25 THE WITNESS: Thank you.</p>

<p style="text-align: right;">Page 45</p> <p>1 MR. BURGER: I've got -- I've got a 2 few follow-up questions. I'll try to be brief. 3 EXAMINATION 4 BY MR. BURGER: 5 Q. Dr. Wray, in the context of Mr. Jarvis's 6 earlier questions to you about the exposure, the 7 concentration level to which Mr. Maas was exposed, 8 to be clear, you didn't know or know of Mr. Maas 9 in the summer of 2010, did you? 10 A. Correct. 11 Q. Where were you situated in the summer of 12 2010? 13 A. I was here in Nashville. 14 Q. Okay. I thought you said you came here in 15 2007. So you -- you never were on the boat with 16 Mr. Jarvis and his mates in the summer of 2010, 17 were you? 18 A. No. 19 Q. You don't know what was -- what he was 20 told by BP? You don't know what he experienced 21 other than accepting the veracity, the credibility 22 of what he's telling you? That's the total source 23 of your information of his concentration -- 24 A. That's correct. 25 Q. For purposes of your evaluation and</p>	<p style="text-align: right;">Page 47</p> <p>1 today to change your diagnosis? 2 Again, on a standard of reasonable 3 medical certainty and a causation standard of 4 probability or likelihood, anything you've seen 5 that would change your reason for diagnosing this 6 man with a chemically induced asthma? 7 A. No. 8 Q. You stand by that diagnosis and your 9 opinion? 10 A. Yes. 11 Q. With regard to the idea of a differential 12 diagnosis being charted or -- or the lack thereof 13 in your chart, were you ever provided anything 14 from any source that suggested the need to 15 consider any differential diagnosis based on what 16 you had gathered from his history and the records 17 that you've seen from Cookeville? 18 A. No. I mean, it's -- when I see someone, a 19 new patient, with shortness of breath and 20 respiratory symptoms, it's pretty common for me to 21 do breathing tests and a CT scan to -- to look for 22 other things that could be going on, pulmonary 23 fibrosis, what have you, but -- 24 Q. I guess my question about that -- not to 25 cut you off. My question about that is: If you</p>
<p style="text-align: right;">Page 46</p> <p>1 diagnoses of him in your -- as reflected in your 2 records, have you accepted as true and accurate 3 and complete his description until shown 4 otherwise? 5 A. Yes. 6 Q. Have you been shown anyone -- anything by 7 anyone that would -- would suggest that he had 8 either minimal or no concentration? Has anyone 9 documented anything to you that suggests he was 10 not truthful -- 11 A. I have not had anything like that 12 suggested to me. 13 Q. When -- to be clear, when you made your 14 diagnosis on the heels of the Cookeville doctor 15 who had diagnosed him, were you even aware that he 16 was involved in a lawsuit anywhere at the time? 17 A. No. 18 Q. Did his statements to you about any 19 lawsuit at any time in any way influence your 20 diagnosis, the -- the credibility of your 21 diagnosis, in your opinion? 22 A. No. 23 Q. On a standard of reasonable medical 24 certainty, is there anything that you have seen, 25 that you have been shown, that would cause you</p>	<p style="text-align: right;">Page 48</p> <p>1 don't -- if you're treating a patient, you're just 2 treating a patient, do you pursue rabbit runs for 3 differential diagnoses if there's not something to 4 suggest the need to do that? 5 A. I -- I tend to -- I guess I'm not quite 6 sure how to answer that question. If -- 7 Q. Did you ever see anything in either the 8 history or in the records that you saw that 9 suggested the need to pursue a route of further 10 investigation for a differential diagnosis or were 11 you convinced of his -- 12 A. Yeah. No. Not -- not past the initial 13 studies that I ordered. 14 Q. Have you seen any record that suggests to 15 you a chronic serious respiratory issue for 16 Mr. Maas prior to 2010? 17 A. No. 18 Q. The description of -- have you ever seen 19 anything that suggested that he was prescribed 20 anti-inflammatories, Prednisone-type medications, 21 before 2010? 22 A. No. 23 Q. Those things that you observed in there, 24 the -- the nebulizer, et cetera -- well, what else 25 besides asthma -- if you'll give us the list, what</p>

<p style="text-align: right;">Page 49</p> <p>1 else are those things that -- that you recited on 2 the record here, what are they typically used for 3 in treating your patients? 4 A. Use it for asthma. Sometimes use it for 5 bronchiectasis, COPD. Sometimes they get used for 6 acute inhalation of substances. 7 Q. Sinus allergies, things of that nature? 8 A. Could be. 9 Q. Once asthma is diagnosed, is it -- is it a 10 chronic condition or does it abate and reappear 11 years later? 12 A. It can -- it can behave in a lot of 13 different manners. It's often a chronic 14 condition. It can wax and wane over time. 15 Sometimes it can go away and come back. 16 Q. Whatever he had going on in 2002, have you 17 seen any kind of record from any source at any 18 time, if I can make it that broad, state it that 19 broadly, that he was having any issues between 20 2002 and, for that matter, 2012, I think, when he 21 first started having these residual problems after 22 the 2010 -- 23 A. I haven't seen any records to that effect. 24 Q. More broadly stated, has anybody shown you 25 any record from any source that suggested that in</p>	<p style="text-align: right;">Page 51</p> <p>1 diagnosed him and -- and ran those tests up in 2 Cookeville, what is it objectively -- not -- 3 excluding everything that Mr. Maas says to you 4 subjectively, what is there objectively that 5 supports your conclusion that it's -- first of 6 all, that it's asthma and, secondly, that it was 7 chemically induced rather than idiopathic? 8 A. So I missed the first part of the 9 question. 10 Q. Yeah. In layman's terms, to help us 11 laymen understand, as you looked at the Cookeville 12 materials that we have in this record and if you 13 looked at -- at your own records, what is there 14 objectively -- if you exclude what Mr. Maas says 15 to you historically or set it aside, what are 16 you -- what are you looking at objectively that 17 first would say, This supports the conclusion that 18 this man has asthma, idiopathic or otherwise, and 19 number two, that it's chemically or irritant 20 induced? 21 A. The -- the symptoms that he reports are 22 asthmatic symptoms. The breathing tests that he 23 had, in my opinion, are consistent with asthma. 24 The absence of any major structural abnormalities 25 on his chest CT scan is consistent with asthma.</p>
<p style="text-align: right;">Page 50</p> <p>1 2003, '04, '05, '06, '07, '08, '09, '10 and '11, 2 he was having any kind of respiratory issue, 3 period? 4 A. No. 5 Q. Have you ever in your -- back up here just 6 a minute. You are a board-certified 7 pulmonologist; is that correct? 8 A. Yes. 9 Q. Give us a short three-minute layman's 10 description of the specialty of pulmonology. 11 A. Treatment of lung and respiratory 12 diseases. 13 Q. How many times in your practice here in 14 Nashville as a board-certified pulmonologist have 15 you referred a patient to an internal medicine 16 specialist for further follow-up treatment for a 17 respiratory problem? Have you ever done that one 18 time? 19 A. I don't think I've ever done that. 20 Q. And why not? 21 A. Because usually they're sending them to me 22 to -- 23 Q. In layman's terms, as best as you can 24 describe it, can you tell me either in your chart 25 or the chart that came to you from the people that</p>	<p style="text-align: right;">Page 52</p> <p>1 And the temporal relationship of the 2 symptoms after his exposure to Corexit suggests to 3 me that it was probably chemically induced asthma. 4 Q. And, again, within that broad standard of 5 reasonable medical certainty, how unusual or how 6 typical is it for a middle-aged man to develop 7 asthma at a late stage in his life? 8 A. Not -- not terribly usual. It -- it can 9 happen, but it's unusual. 10 MR. BURGER: Thank you. That's all I 11 have. 12 MR. JARVIS: Further deponent sayeth 13 not. How do you like that? 14 THE WITNESS: I like that. 15 THE VIDEOGRAPHER: This concludes the 16 video deposition of Dr. Charles Wray on Media 1, 17 and we're off the record at 2:45 p.m. 18 (Proceedings adjourned at 2:45 p.m.) 19 20 21 22 23 24 25</p>

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1 E R R A T A

2
3 I, CHARLES WRAY, M.D., having read the
4 foregoing deposition, do hereby certify said testimony
5 is a true and accurate transcript, with the following
6 changes (if any):

7
8 PAGE LINE SHOULD HAVE BEEN

9 _____
10 Reason for change:

11 _____

12 Reason for change:

13 _____

14 Reason for change:

15 _____

16 Reason for change:

17 _____

18 Reason for change:

19 _____

20 Reason for change: _____

21

22

23 _____
24 CHARLES WRAY, M.D.

25

Notary Public

25

My Commission Expires: _____

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1 C E R T I F I C A T E

2
3 I, Rhonda Nicholson, Registered Court Reporter
4 and Notary Public, State of Tennessee at Large, do
5 hereby certify that I recorded to the best of my skill
6 and ability by machine shorthand the deposition
7 contained herein, that same was reduced to computer
8 transcription by myself, and that the foregoing is a
9 true, accurate, and complete transcript of the
10 deposition testimony heard in this cause.

11 I further certify that the witness was first
12 duly sworn by me and that I am not an attorney or
13 counsel of any of the parties, nor a relative or
14 employee of any attorney or counsel connected with the
15 action, nor financially interested in the action.

16 This 4th day of August, 2021.

17

18

19

20

21

Rhonda Nicholson

Rhonda Nicholson

22 LCR No. 160, Exp: 6/30/22

23 My Commission Expires: 5/2/2022

24

25

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